DOCUMENT RESUME

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ABSTRACT

A program description and sample program materials of a self-paced, individualized mathematics program designed to improve the achievement of junior high school students are presented. The usual daily activities of the students include a quiz, work in drillbooks, and work in the Basic Skill Levels curriculum--the heart of the program. Each of the 26 sequential Basic Skill Levels includes a pretest, four to 14 lessons, quizzes (checkpoints) after each fourth lesson, and a posttest. Students must successfully complete the level they are on before proceeding to the next. Group instruction is provided by weekly Enrichment Day activities which employ filmstrips, manipulative materials, motivational games, and worksheets. Among the reported results of the program are an increase in 1982-83 seventh-grade achievement on the Comprehensive Test of Basic Skills (CTBS) of 3.4 months for each month of instruction. Materials provided in this document include: (1) descriptions of the daily classroom routine, the math office, and Enrichment Day; (2) lists of program goals and achievement test results from 1977-1983; (3) descriptions of program components and procedures; (4) sample grade sheet, quiz, pretest, lessons, checkpoint, posttest, student profile sheet, final exam, drill sheets, and progress reports; and (5) CTBS scores and evaluations. (DC)

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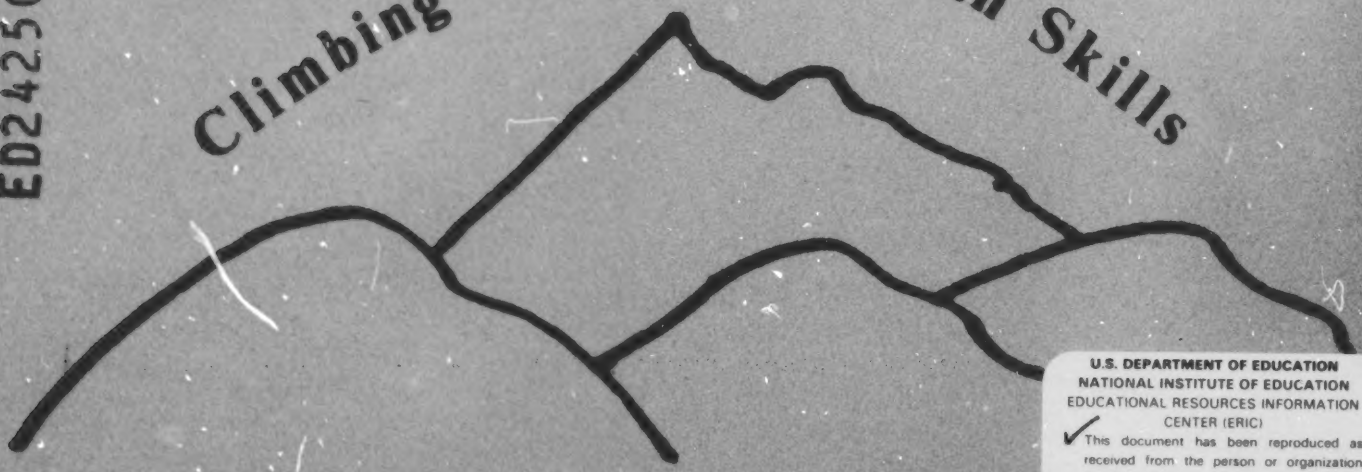
Climbing the Hills of Math Skills



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CALIFORNIA

DEMONSTRATION

MATHEMATICS PROGRAM

OVERVIEW BOOKLET

SE044126

Hillview Junior High
Pittsburg Unified School District
Pittsburg, California

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PROJECT OVERVIEW

CATALOG NUMBER: FP 000 310

LOCAL EDUCATIONAL AGENCY:
Pittsburg Unified School District

PROJECT TITLE: California Demonstration Program in Mathematics: Hillview Junior High (6-12)

ABSTRACT:

The California Demonstration Program in Mathematics: Hillview Junior High is designed to increase the mathematical achievement of junior high school students and remedial high school students. The program is a blend of individualized instruction and some group instruction. There are 24 Basic Skills levels in which students are placed according to their needs. After being pretested, students work through the levels at their own pace with a push from a contractual time limit. Classroom activities include drills, homework, Basic Skills lessons and testing. Group activities include daily quizzes and Friday group topics. One fourth of the class is assigned each day to work in the Math Center. The Math Center activities rotate on a 2-week cycle of group topics and individual Basic Skills activities. An important motivational aspect of the program is the daily reward for being a student aide. Key elements of the Hillview program include: 1) heterogeneous grouping, 2) retention of skills, 3) contracts, and 4) student responsibilities.

ADDRESS:

Hillview Junior High
333 Yosemite Drive
Pittsburg, CA 94565

CONTRACT: California Demonstration Program

PUBLICATION DATE: 1981

STATUS: Active

DESCRIPTORS:

Basic Skills
Cal Demo
Diagnostic Teaching
Individualized Instruction
Mathematics
Performance Contracts
Remedial Instruction

TARGET GROUP(S):

Junior High School Students
Junior High School Teachers
Secondary School Students
Secondary School Teachers
Underachievers

TEACHING METHODS:

Diagnostic Teaching
Enrichment
Individualized Instruction
Learning Laboratories
Performance Contracts
Remedial Instruction
Sequential Approach

LEARNING ACTIVITIES:

Drills (Practice)
Educational Games
Group Activities
Mathematical Applications
Problem Solving
Worksheets

PROJECT MATERIALS:

Catalog Number	Title	Site
FD 001 818	California Demonstration Program in Mathematics: Hillview Junior High: Overview Booklet (6-12)	C/N/S
FD 001 819	Word Search Packet (6-12)	C/N/S
FD 001 820	Basic Skills Levels (6-12)	C/N/S

HW
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HILLVIEW JUNIOR HIGH

PROGRAM PERSONNEL

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Jack Archambault

Project Director

David Ward

Teachers

Linda Leary Carole Moore

Barbara Bloodwell

Instructional Aides

Cathy Borjon Beverly Buffo

Becky Patague

Secretary

Carol Davi

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PROGRAM HISTORY

Hillview Junior High has been associated with State Demonstration Programs since 1972. That was the year Central Junior High in our district became a State Demonstration Program in reading (PREP). When the Northern California Conference was held in San Jose, we had the opportunity to attend from our district.

We were overwhelmed by the quality of materials that the Demonstration Programs had to offer free. We collected just about every booklet we could get our hands on in mathematics. We kept thinking to ourselves, "If only we had money, we could do the same things".

We felt that something had to be done with the low groups. After attending both of the Long Beach Demonstration Program in Mathematics workshops, we were very impressed with the management and layout of their program of Pretest, Checkpoints, Posttests and Quickie Quizzes, and signed up for their free Quickie Quizzes and Lesson packets.

When we returned to school, we were able to obtain $500.00 from our school's duplicating fund to run off the materials. That summer, we revised and retyped all the basic skills levels of the Long Beach Demonstration Program. We also received two (2) semester District units. We were all ready to start individualizing our C and R groups the beginning of the next school year, 1972-1973, on $500.00 and alot of time.

In 1974, we received information that the State was going to offer to other Junior High Schools in Districts, with Demonstration Programs, a chance to copy (replicate) a successful program in the state. We visited several programs, wrote our application and submitted it on December 12, 1974. Well, we were turned down. Our basic math classes were going along getting favorable growth.

Then, in December of 1976, we received a letter indicating that we were now approved to become a replication program in Mathematics. We took our basic skills levels and added a Math Center, aides, project director, secretary and launched our program. The next four years we had attended the Northern California Conference as an observer. Now, we have the opportunity to present workshops and tell others about our program.

David Ward

David Ward
Project Director
Hillview Junior High
California Demonstration Program
in Mathematics

PITTSBURG UNIFIED SCHOOL DISTRICT

STATE DEMONSTRATION PROGRAM IN MATH

Hillview Jr. High School
333 Yosemite Dr.
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PROGRAM NARRATIVE

The California Demonstration Programs in Reading and Math, funded by the State, were created to help increase student achievement scores in reading and math. One unique feature of the Demonstration Programs is the yearly evaluation where growth is compared to the additional cost per student and a cost-effectiveness factor is derived. The program with the lowest cost-effectiveness factor is terminated. This approach keeps each of the twenty-eight projects in the State continually striving for improvement.

The California Demonstration Program in Mathematics at Hillview Junior High is in its eighth year. The staff includes three teachers, three classroom aides, one secretary and one program director. The Program includes seventh and eighth grade students, changing grade level each year to "follow" a cohort from one level to the next. After the project's class graduates from eighth grade, the next year's seventh grade class becomes the next cohort. Thus, at any one time, the Program is working with

either the entire seventh or the entire eighth grade.

Classroom grouping is heterogeneous. The Program uses a blend of individualized and group instruction with emphasis on retention of skills and the development of responsible classroom behavior by the student.

One way to describe the program is to describe the daily activities of the students. Everyday when students enter the classroom they are responsible for handing in their homework and picking up their folders, drillbooks and Daily Quiz sheets before the bell rings. When the tardy bell rings, the lights go out, the overhead projector is turned on, and the five minute Daily Quiz begins. Daily Quizzes consist of six problems: two or three stress the weeks concepts and three or four are review questions. The quizzes are then collected, corrected and explained.

Students then work ten minutes in their drillbooks. Spectrum Math series and BFA workbooks are used for drill. Students are assigned drillbooks based on their pretesting score on the Comprehensive Test of Basic Skills (CTBS). Drill is the primary technique used to encourage retention of skills.

The remainder of the fifty minute class is used to work on Basic Skill Levels. Two minutes before class ends is clean-up time. Students put away their drillbooks and folders.

The key to the Program's success is the lesson structure we have developed. The heart of the program is our 26 Basic Skills Levels which follows a learning continuum of objectives based on the State School Framework. Each Basic Skills Level consists of a Pretest, 4 to 14 lessons, some quizzes, called checkpoints, to

gauge progress and a Posttest. The Basic Skills Levels are written and revised annually by the staff.

A student takes a pretest, then it is corrected and lessons are assigned according to student needs. Students work, at their own pace, through required lessons and correct their own lessons. Checkpoints (quizzes) are given after every fourth lesson to make sure the student has mastered the concepts and computations found in the lessons. When all necessary lessons and checkpoints are passed, the student takes a posttest. The teacher or aide corrects all checkpoints and tests. Upon completion of a level, the student advances to the next level. About two months after a level has been passed, a follow-up level review is given to assure continued skill retention.

Enrichment Day occurs once a week in each classroom in order to expose students to new concepts and give them a group instructional day. Filmstrips, manipulative materials, games and worksheets are used. The Enrichment Day activities are planned and developed at weekly staff meetings to make sure what is taught is of greatest value to the students.

As an outgrowth of Enrichment Day, the staff has developed Innovative Teaching Games ("IT" games) that range from board games, in which each student uses problem cards from the level they are working on, to card and dice games geared to many of the levels in the program. These are great motivational games for the students and they show that math can be fun. Teachers attending our workshops at conferences have responded enthusiastically about the "IT" games.

The results of the program are carefully monitored through

a program of testing and quality control. Each year the program is evaluated by means of pre- and post-testing using the CTBS test. Last year, in 1982-83, the 7th grade showed a 3.4 months growth per month of instruction. Using the grade equivalency scale, the 7th graders pre-tested 6.4 in September and post-tested 9.7 in May.

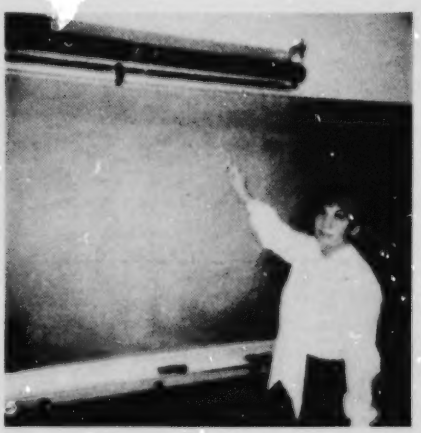
Student and parent surveys given at the end of the year reflected positive attitudes about the project. Last year the program was also recognized by the Contra Costa County Association of California School Administrators as a Program of Excellence in the County. The program has had a great deal of favorable public response and is definitely making the community aware of the potential of our students and that public schools can be successful.

Two years ago the program started a longitudinal study of former project students. Our first group of students were then Seniors at the local high school. Through a student survey given to former students of both feeder junior high schools, a trend could be established. In the tenth grade the percentage of students taking math classes was the same (90%). This is in part due to high school requirements. In the twelfth grade, 40% of former Hillview students were enrolled in math classes compared to 29% from Central Junior High. In higher level math classes, Hillview dominated with 32 students as compared to 8 from Central.

Former students were also interviewed by an outside evaluator, and 82% of the students felt the program had helped or encouraged them to take more math classes. The interviews also elicited many positive comments about the program from these students four years after participating in the program.

The project is also fulfilling its purpose as a Demonstration Program by letting other educators know about our ideas and materials. Information and materials are free upon request; 85 Basic Skills packets were mailed last year. The project also participated in State-sponsored conferences by setting up an information booth and giving workshops for teachers. As a result, materials developed in the project have been adopted at all levels of education. With the help of our Overview Booklet and Basic Skills Levels any teacher, with time, can replicate our program. We know of 28 schools using our Basic Skills lessons regularly, ranging from elementary schools to junior colleges and adult education programs.

Onsite visitions by parents, educators and the community are welcomed with no appointment necessary. Because we know our program is successful, we are enthusiastic about sharing our ideas and materials.



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CLASSROOM ROUTINE

Students enter and pick up their Daily Quiz paper, drill book and/or folder, and hand-in their weekly homework packet, if finished. They are now ready for their fifty minute class.

The class begins with a five minute Daily Quiz containing six (6) problems.

The Daily Quiz is immediately gone over. New concepts are introduced and old one re-explained that will appear on future daily quizzes.

Students then work in their drillbooks for ten minutes. Many students are exposed to new ideas in their drillbooks and much emphasize is placed on word problems.

Student Aides correct Daily Quizzes and drill. They also run errands, file papers and record points.

The remainder of the period, students work on their individual lessons, take tests, or checkpoints. The last three (3) minutes is used for cleaning and set-up for the next period.

MATH OFFICE

Pretests, checkpoints, posttests and activity pages for homework are stored in the Math Office and provides an inventory control of the testing materials.

Was that lesson F-3 or F-4? All lessons are stored in Room 108 in literature storage units. A quick glance will alert the teacher or aide that it is time to restock certain lessons. A note is sent to the math office where the secretary will find the stencil and run off more copies.

These two machines are the workhorses of the project:

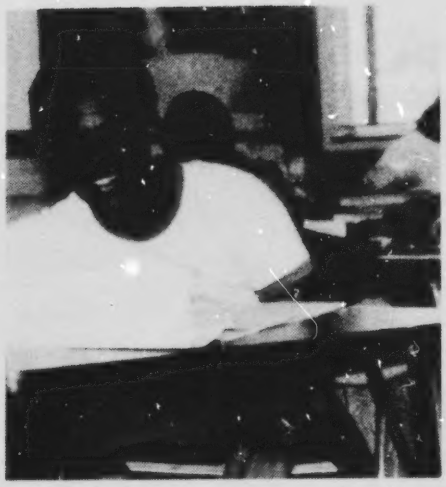
-stencil maker
-mimeograph

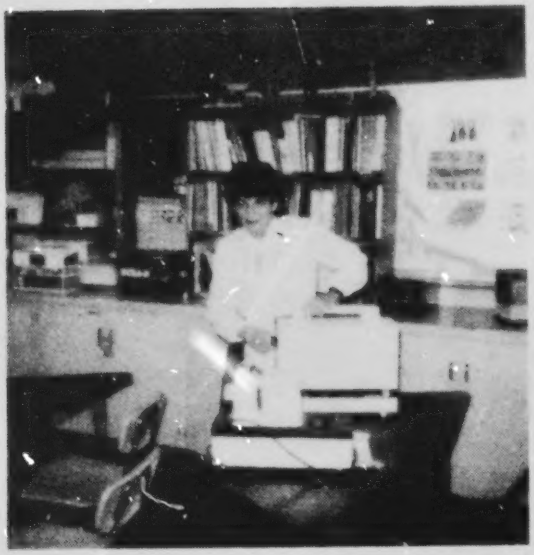
We are independent of outside printers and routinely restock material from stencils kept on file.

ENRICHMENT DAY

Enrichment Day occurs once a week in each classroom to expose students to new concepts and review.

Weekly staff meetings are held to plan future enrichment days.





Filmstrips, Manipulative games and worksheets are used for Enrichment Day.

The staff developed Innovative Teaching games that ranged from board games to using cards or dice.

GOALS

2 year Student Goals

Mathematics Achievement of at least two month's growth per one month of instruction based on the CTBS test.

Increase the self-concept of each student (measured by Self-Concept Survey) using Superstars and other student recognition programs (Awards night, compliments).

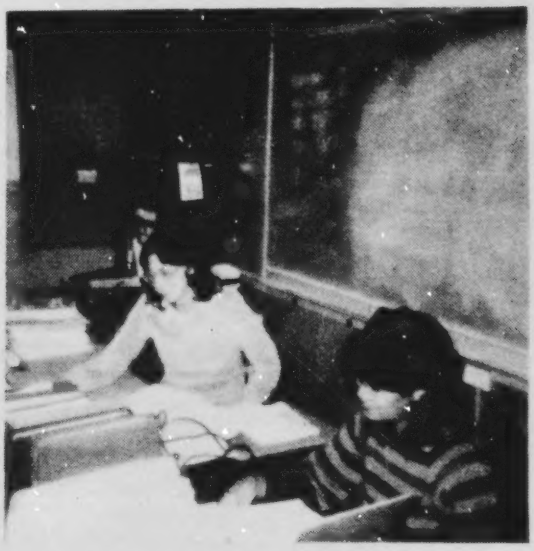
Increase interest in higher mathematics courses in high school.

Increase awareness of math related careers.

Student mastery of whole number operations.

75% Student mastery of decimals.

75% Student mastery of fractions.



RESULTS

CTBS 2 Years Growth
beginning of 7th grade and end of 8th grade

DATES	GRADE EQUIVALENCY		MONTH GROWTH PER MONTH OF INSTRUCTION
	PRE	POST	
March 1977 to May 1978	7.0	9.7	2.5
Sept. 1978 to May 1980	6.4	10.0	2.3
Sept. 1980 to May 1982	6.4	10.5	2.6
	1 year growth		
Sept. 1982 to May 1983	6.5	9.2	3.4

1982 - 1983 1 year only
7th grade

EFFICIENCY AREAS	PERCENT OBTAINED	GOAL	% OF GOAL ACHIEVED
Whole Number	89%	100%	89%
Decimals	62%	75%	83%
Fractions	80%	75%	107%

PROGRAM COMPONENTS AND PROCEDURES

CHECKPOINTS
DAILY QUIZ
HOMEWORK
FINAL EXAM
LEVEL REVIEW
ENRICHMENT
SUPERSTARS
DRILL
PRETESTS
LESSONS
STUDENT AIDES
OBJECTIVES
POSTTEST

COMPONENTS

* Daily Quiz - A short quiz of 6 problems at the beginning of the period that helps students review concepts they may have forgotten and expose them to new ones.

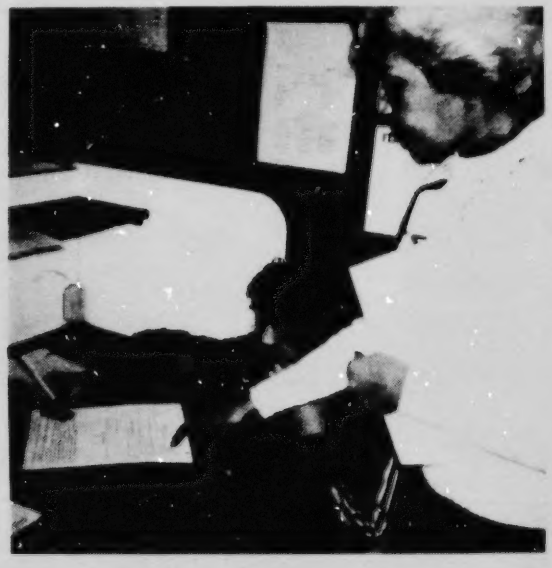
* Drill - The Spectrum Math Series and BFA workbooks are used for drill. Drill is 10 minutes 4 days a week and is designed to give practice with math problems, or great retention of skill.

* Study Levels - This is the heart of the program, the classroom materials. There are 188 lessons in the program, grouped into learning levels. Each lesson covers a certain concept or objective in Math. There are 26 levels on Basic Skills.

  Study levels work this way: A Pretest is given at the beginning of a level to find out what the student knows. He is then assigned only those lessons that he needs help on. Checkpoints are quizzes given after every fourth lesson to make sure he has understood the lessons. When he has finished all lessons and checkpoints, a Posttest is given to see if he has learned the complete level. About two months after a level has been passed, a follow-up level review is given to assure continued skill retention.

* Enrichment Day - This day is held once a week in the classroom to introduce new concepts to the total class. Manipulatives, games and filmstrips help supplement this day.

* Homework - Weekly packet of 5 pages, usually individualized to review last level student passed. Most homework comes from Electric Drill by Jan Fair. The last page is usually an activity page suce as a word search or mind bender.



Grade Sheet

First a class list is written on a grade sheet. All records are temporarily kept until the class roll is revised, usually the second week after classes stabilize.

Then eight copies are made for the components of the program as follows:

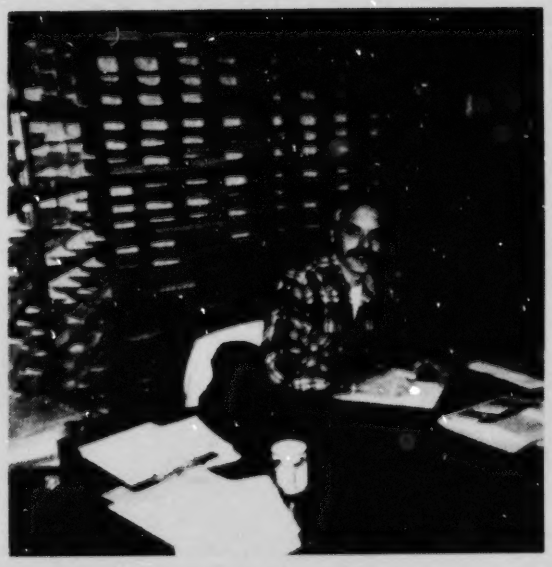
4 - Daily Quiz and Attendance

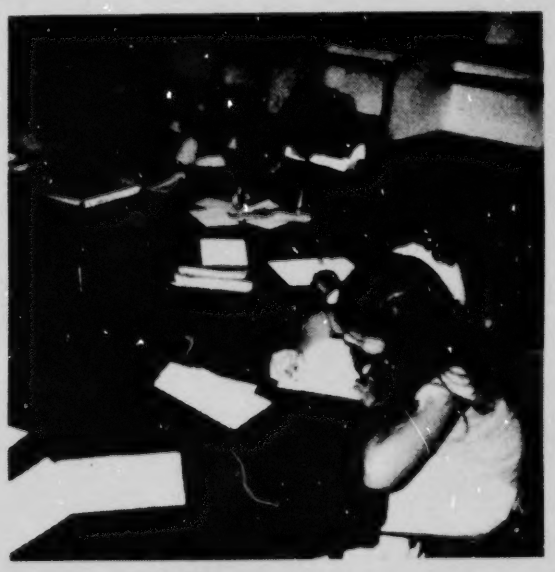
1 - Homework assignments and grades (sometimes 2 sheets are needed)

1 - Levels passed record

1 - Enrichment Day

1 - Miscellaneous (usually original) kept in case more copies are needed, worksheet for final grades and/or student aides records.





DAILY QUIZ

AND ATTENDANCE RECORD PROCEDURES

Recording Symbols

X - Absent
P - Pass
FT - Tardy "F" on DQ
FG - Gum "F" on DQ
FTA- Talking "F" on DQ
FP - No pencil "F on DQ

More symbols are made up, as needed. The "F" on DQ is equivalent to a "0".

DAILY QUIZ SCORES

6 points each day

10% of final grade

DAILY QUIZ AND ATTENDANCE RECORD

	M	T	W	TH	F	TOTAL	M	T	W	TH	F	TOTAL	M	T	W	TH	F	TOTAL	GRAND TOTAL
1. ALLEN, JIM	6	3	6	5	6	26	FT	X	2	3	4	9	5	4	2	X	X	11	46
2. BELLECI, SARAH	5	4	3	4	6	22	X	X	X	3	P	3	4	5	5	4	6	24	49
3. CARAVIC, ANTONIO	4	2	X	4	6	16	4	3	5	0	4	16	FG	3	2	0	2	7	39
4. SCLIS, VIRGINIA	5	4	5	5	6	25	5	5	4	5	6	25	4	3	FTA	5	6	18	68
5. TUMBACA, JOHN	0	2	FT	FT	2	4	3	4	3	1	6	17	5	4	5	3	6	23	44
6.																			

For the final trimester grades, the student's points are totaled and grades are then rewarded based on the following chart.

TRIMESTER GRADE CHART

Daily Quiz, Drill, Homework

300	A+
299 - 280	A
279 - 270	A-
269 - 260	B+
259 - 250	B
249 - 240	B-
239 - 230	C+
229 - 220	C
219 - 210	C-
209 - 200	D+
199 - 180	D
179 - 150	D-
149 ↓	F

DRILL

We are utilizing the Spectrum Math Series and BFA workbooks. Students are assigned a drillbook based on their total grade equivalency on their CTBS (Comprehensive Test of Basic Skills) Pretest.

7th Grade	DRILLBOOK Spectrum	8th Grade
2.0 - 3.9	Red	BFA Workbooks
4.0 - 5.9	Orange	for students
5.0 - 7.9	Yellow	below grade level
8.0 - 9.0	Green	8.0 - 8.9
9.0 - 12.9	Blue	9.0 - 12.9
	Purple	Pre-Algebra classes only

Pretests are corrected and the date recorded on the drill sheet. All word problem pages are assigned and practice sets, as needed, by circling the page number. When a page is completely correct, it is dated. The posttest, percentage correct, is recorded along with the date (see sample below).

DRILL RECORD (Green Book) NAME_____

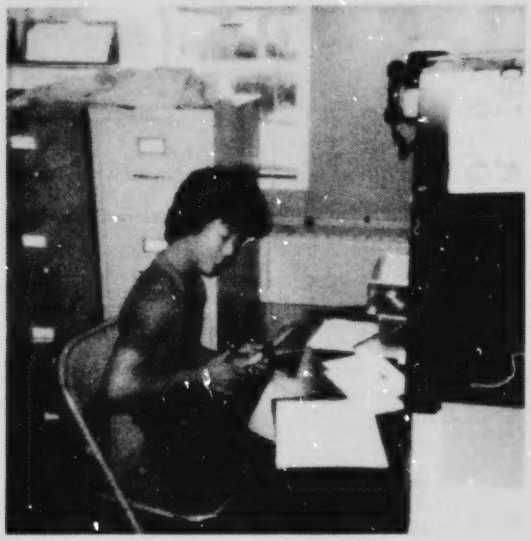
Score % Date	Practice	Word Problems
Add and Subtract		10-18 10-18 10-20
Pre (2) 10-17	3 4 5 7	(1) (6) (8) total 6 opts
Post 11	9	(10) 10-20
Multiply and Divide	10-26	10-27
Pre (12) 10-25	13 (14) 15 17	(16) (18) (20)
Post (25) 10-26 100%	19 21 (23) 10-27	(22) (24)

drill

Students are expected to complete about 3 pages of drill a week. Tests and practice pages are 20 points per entry and word problems are 10 points each. Each page in the BFA workbook is 10 points. Drill is 10% of the final grade.

- When students in the classroom are waiting for test to be corrected, they work in their drillbooks.
- Teacher or aide corrects drill work and records points.
- Drillbooks are non-consumable; students work on scratch paper.

STUDENT AIDES



All students get a chance to help in their program. We have found that it helps the low students to have the responsibility. There is one student aide assigned to each day. Their main function is correcting drill work, daily quizzes and checkpoints.

When an Instructional Aide is absent or there is a substitute teacher, the student aide has even more responsibility. Student aides also tutor their peers when the need arises.

Since all students get a chance to be an aide, they have a better understanding of how the program works.

We used student aides very successfully before we were a State funded project. It is a great motivator!

STUDY LEVELS

The 26 basic skills study levels are the heart of our program. There are 188 lessons, each with a certain objective.

The Basic Skills Study Levels are:

A	Introduction to Numbers
B	Addition of Whole Numbers
C	Subtraction of Whole Numbers
D	Multiplication of Whole Numbers
E	Division of Whole Numbers
F	Working with Whole Numbers
G	Introduction to Fractions
H	Multiplying and Dividing Fractions
HA	Addition and Subtraction of Fractions
I	Working with Fractions
J	Introduction to Decimals
K	Addition and Subtraction of Decimals
L	Multiplication of Decimals
M	Division of Decimals
MA	Working with Decimals
N	Ratios
O	Proportions
P	Proportion Method of Solving Percent Problems
PA	Percents, Fractions, Decimals
Q	Geometry (Lines, Angles, Triangles)
QA	Geometry (Angles, Polygons, Circles)
R	Similar Figures
S	Measurements (English System)
T	Measurements (Metric System)
U	Perimeter and Area
V	Volume

study levels

The study levels consist of four parts. First a Pretest to determine the student's deficiencies on that level. If a students scores 100% on a Pretest, they take the next level pretest. Lessons are assigned based on which areas on a Pretest the student needs to learn.

A checkpoint is a ten (10) problem quiz designed to see if the student has understood the lessons. Checkpoints cover groups of 4 or 5 lessons.

If successful, the student works on the next group of lessons, corrects them and takes another checkpoint on that group. If a student was not successful, the teacher or aide will tutor them. An alternate checkpoint is then given. When all checkpoints assigned to a student are passed in the level, a Posttest is given. The student passes the level when all problems are correct and then proceeds to the next level.

If a student is not successful, a pretest is then given as an alternate Posttest. Some students skip levels and will attempt them again at a later date. All material is color coded for easier management: Pretest - Green, Lessons - White, Checkpoints - blue and Posttests - gold.

Recording Procedures - Each student has a student folder and master folder with a profile sheet attached inside. When a pretest is completed the date is put on it and lessons prescribed are circled. Checkpoints are recorded with the date passed or a note of further assignments. All lessons, tests, and checkpoints are put in a box and recorded and filed in the master folders after school. This gives more time during class to help the students. Posttests follow the same procedure (see example below) and the points earned are recorded on the left side of the profile sheet.

PROFILE SHEET - BASIC SKILLS

LEVELS	PRETEST		CHECKPOINT		CHECKPOINT	POSTTEST
267 B / 400	9/20	1 2 3 4	133	5 (6) (7) 9/23 9/27	quiz alt 9/28 133	9/24 134
200 C / 400	9/29	1 2 3 4	133	5 6 7	133	134
600 D / 600	10/3	1 2 (3) (4) 10/4	10/5 150	(5) (6) 7 [8] (1) 10/10 10/11	try D.S. system 10/12 150	X
D	X	(9) (10) 10/17	quiz alt 10/13 150	X	X	10/20 150
200 A / 600	10/24	1 2 3	200	4 5 6 (7) 10/25	10/26 200	200

When a student passes a level, it is marked on a levels passed sheet (see example below);

LEVELS PASSED

HILLVIEW JUNIOR HIGH SCHOOL

TEMPORARY GRADE SHEET

MOORE 2ND

2ND TRIMESTER

	B	C	D	A	E	F	G	H	HA	I	J	K	L	M	MA	N	O	P
1. ADAMS, SALLY					■	■												
2. BARRETT, DOLORES			■	■														
3. CARMITO, ANTONIO											■	■	■					
4. PARENT, OLLIE						■	■	■	■	■								
5. WINDER, SAMUEL			SKIP			■	■											
6. YEMEN, JUNE								■	■	■	■							
7.																		

We use different marks to show what trimester a level was passed or what levels a student does not need to do. The levels passed sheets are used to assign homework and a quick reference for Enrichment Day activities.

GRADING

Levels have a maximum point total of 400 or 600. Each level is divided into sections and each section is a fractional part of the Level. Sections are either lessons and a checkpoint or Posttest. For example, Level B has 3 sections, so each section is worth 1/3 of 400 points or 133 points. (See profile sheet, page 16)

When a level is passed, points are totaled. Points are earned in the following ways:

Parts of Level passed	Section points earned
Pretest only	1
1 lesson, checkpoint	1
2 or more lessons, checkpoint same section, Posttest	2
2 or more lessons, 2 checkpoints, different sections, Posttest	3
All sections	Total Level points

In 8th grade at the beginning of the year, students take Level Reviews on all Levels passed in 7th grade. Level Reviews, if passed, are 50 points. Any section of a level that need to be taken are half credit.

When all required level reviews are passed, the 7th grade points procedure is followed.

LEVELS - 1600 Points - TRIMESTER

1600	A+	1279 - 1240	C+
1599 - 1500	A	1239 - 1160	C
1499 - 1440	A-	1159 - 1120	C-
1439 - 1400	B+	1119 - 1060	D+
1399 - 1320	B	1059 - 1000	D
1319 - 1280	B-	999 - 800	D-
		799 ↓	F

ENRICHMENT DAY

Enrichment Day is held once a week in the classroom. After the Daily Quiz, the class covers a specific topic using manipulatives, filmstrips, games and worksheets. Topics are selected at weekly staff meetings to be current and of greatest value to the students.

Grades for Enrichment Day are based on participation in class, completeness of assignment and behavior. A maximum of 50 points are earned for each of the 10 Enrichment Days in a trimester. This is 16 2/3% of their final grade.

TRIMESTER GRADE CHART

ENRICHMENT DAY

500	A+	399 - 383	C+
499 - 466	A	382 - 367	C
465 - 450	A-	366 - 350	C-
449 - 433	B+	349 - 333	D+
432 - 417	B	332 - 300	D
416 - 400	B-	299 - 250	D-
		249 ↓	F

INNOVATIVE TEACHING GAMES

The staff developed games to help introduce and reinforce many of the levels within the program.

The "IT" Board Game consists of a simple board layout, in a standard folder, and game tokens. The problem cards, where the answer tells you how many spaces to move are in sets to cover all the different Basic Skills Levels in the program.

The "IT" card games use a single deck of playing cards and cover many of the levels in the program.

All these games are in our Innovative Teaching Games booklet and can be requested separately.

HOMEWORK

Homework packets (4 pages) are developed, run-off and filed for each basic skill level of our program. When a student passes a level their homework changes to that level. Homework is a current review of the last level passed. Retention of skills and responsibility to hand it in are the reasons for homework.

ASSIGNING PROCEDURES

Each Wednesday, the classroom "Level passed" sheet are copied. Homework is assigned according to what levels were passed that week. Homework follows a sequence until a Level is passed, which changes the basic homework area.

A tally sheet is made so we know how many of each packet to pull from the files and staple to the common activity page for each week. Student names, teacher, period, assignment number and code are written on the homework. Homework is then grouped by period and teacher, ready to be handed out on Monday. The process takes about four (4) hours to assign and prepare the 240 individual homeworks.

HOMEWORK — HILLVIEW JUNIOR HIGH SCHOOL TEMPORARY GRADE SHEET — BLOODWELL 3RD

													Lweeks
1. BROWN MARTIN	1D	27	2D		3D	24	1E	27	1F	3C	109	C-	
2. CARLENDER CAROL	3F	3C	4F	3C	5F	27	1G	24	2G	27	138	A-	
3. JONES, LUCILLIAN	1K	24	2K	27	1L		2L		1M	24	75	D-	
4. McMillan KATHY	1D	3C	1E	3C	2E	24	1F	3C	1G	27	1M	A	
5. WILSON, RICHARD	1HA	1S	2HA	24	1I	2C	2I	27	1J	2I	110	C-	
6.													

GRADING PROCEDURES

Keys are made for each homework packet and kept in a homework keys folder in the Math office. On each key a fraction is written. The numerator of the fraction tells the maximum number of problems you can miss and still receive credit for that page. The denominator tells the number of problems.

Credit for an individual page is approximately 80% correct. Each page is marked "C" for credit and "NC" for no credit.

GRADE	POINTS EARNED	NUMBER OF PAGES CREDITED
A	30	5
B	27	4
C	24	3
D	20	2
D-	15	1
F	10	0

The homework grade and points earned is then written on the front page of the packet and underlined twice.

The six week (5 homework packets) and trimester (10 homework packets) are obtained by totaling the points earned. See Points Chart on page 11.

LEVEL REVIEW

Special days are selected throughout the year to give students Level Reviews. These are short tests on levels the students have passed in the last couple of months.

This is a procedure to make sure students have retained computational skills and concepts previously mastered.

If a student misses problems on the Review test, they are given a refresher lesson to take home and complete. No points are involved in this component of the program.

Level Reviews are used in the beginning of the 8th grade to quickly review levels students passed in the 7th grade. Each Level Review passed in 50 points and any levels retaken are half credit. Again this helps in assuring that students have retained their skills over the summer.

SUPERSTARS

Every 6 weeks a student from each of the math classrooms is rewarded a Superstars Certificate.

Students are selected on the basis of effort, behavior and co-operation, a model student. This is a motivator to get others in the class to do better.

Their photo is taken and displayed in the main showcase in the school. These students also qualify for special school functions such as a roller skating party.

PARENT AWARENESS

a) Letters to the Parents - Welcome and explanation of the program sent at the beginning of the year and when new students enroll.

b) Parents Night - Open house to visit with staff, see the facilities and ask questions about the program.

c) Parent Survey - twice a year evaluations.

d) Bi-Monthly Newsletter - Staff spotlights, progress of goals, results of surveys, etc.

e) Telephone calls.

f) Individual school visits.

g) Award's Day

climbing the hills of math skills

STATE DEMONSTRATION PROGRAM IN MATH

NEWSLETTER

vol.1 no.1

MATH CENTER

...ay, Tuesday and Wednesday stu-
...ho are on lessons, can get
...in the Math Center. Thurs.
...nts are given level previews
...Fridays they learn math
...s and activities.

...he week, students are
...h Center also to work
...from a problem solv

...ad a contest us-
...t is a push
...that lets the
...the button
...cted, five
...ath pro-
...and Ya-
...erio
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GREAT NEWS

Hillview's Math Project ha...
been selected to be a reg...
Demonstration Program, ...
ning this year. The ...
our (4) years, we ...
very successfu...
ram (a cop...
d with ...

Dear Parents:

Welcome to the Hillview State Demonstration Pr...
matics. The Project is funded entirely by the State
and is refunded based on a cost effectiveness factor.
projects like ours received full funding.

We are happy to inform you that our first project
1977 to June 1978, entered our project with an average
grade level and left our project with an average of eigh...
even greater results. Our second group; Sep...ember 1978 to June 1...
six months below ... The... the program with an a...
month above ... ...d with an average o...
that our project doe...
progress ...r and the opportunit...

Dear Parents:

This letter is to explain notat...
report and a few other notes.

QUICKIE QUIZ GRADE - there are ... quiz. ...lard. ...
ex.) 3.9/5 means 3 and 9/10 pr... 23 ...ct out of ...
5. This is a B

CHECKPOINTS - ...

FINAL EXAM

The test is given the last week of each trimester. It is individualized so that the 50 problems each student receives are based on levels they have passed.

2 bonus points are earned for each problem correct. These bonus points are added to the total points for their trimester grade.

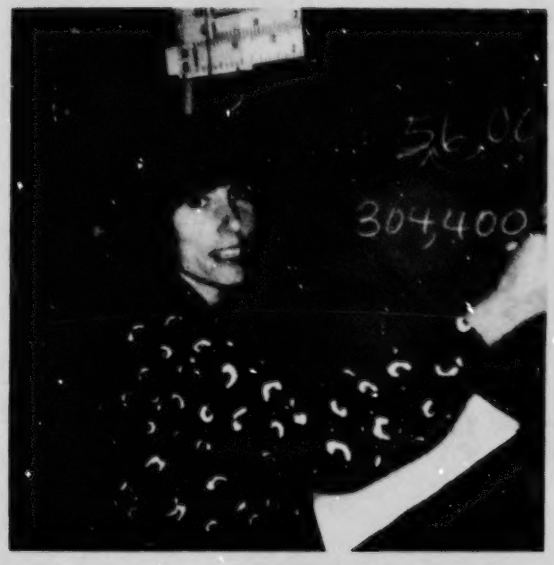
CONCLUSION

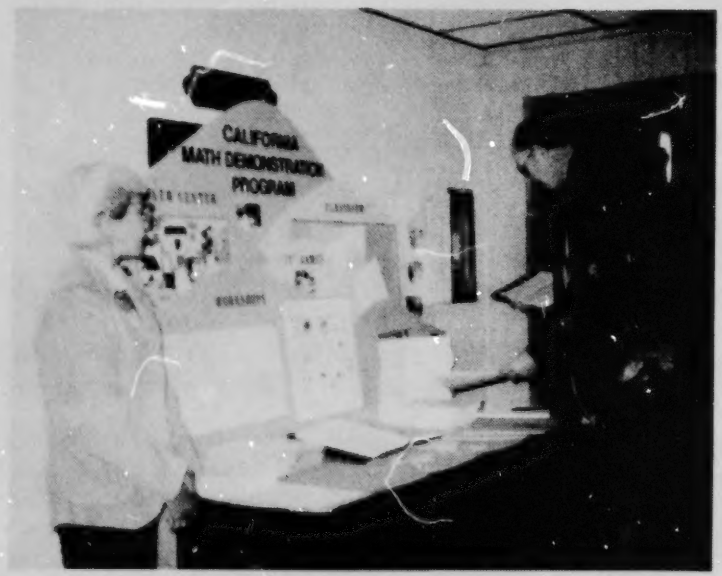
Now, if the components and procedures of the program are clear, great! But, if you are completely confused, do one of three things:

1) Give us a call at (415) 432-8649
2) Visit our program.
3) Arrange for us to visit you and present a workshop.

Again, our program was originally developed based on the Long Beach Demonstration Program. We changed, modified and removed many lessons to fit the needs of our students. Some of our methods and procedures, you may differ with or you may have a method that works better or is easier, please don't hesitate to use them.

If there is one small hint or idea in this booklet that will be useful to you, then we have succeeded.


304,400


CALIFORNIA
MATH DEMONSTRATION
PROGRAM

State Demonstration Program
Pittsburg Unified School District

SAMPLE MATERIALS

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DAILY QUIZ.....28

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(Red, Yellow, Green, Blue)

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State Demonstration Program

Pittsburg Unified School District

HILLVIEW JUNIOR HIGH SCHOOL
TEMPORARY GRADE SHEET

1.																						
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DAILY QUIZ

IN SOLVING WORD PROBLEMS, THERE ARE USUALLY KEY WORDS OR PHRASES THAT TELL YOU WHAT OPERATION TO USE.

WRITE ADD, SUBTRACT, MULTIPLY OR DIVIDE AFTER EACH OF THESE WORDS:

1) DECREASED _____

2) TWICE _____

3) SHARED _____

4) TOTAL _____

5) PER PERSON _____

Name _____ Period ____ Date _____

Pretest L Multiplication of Decimals

1) .2 x .4

2) .3 x 6

3) 1.2 x .3

4) 2.6 x 4

5) 1.7 x 2.3

6) .32 x 1.5

7) .002 x 3

8) 3.01 x .04

9) .71 x .042

10) 28 x .27

11) 1.7 x 2.09

12) .004 x .02

(L-1)

13) Jane walks .3 miles each day. How far does she walk in 5 days? _____

14) Oranges sell for $.15 each. How much does 7 oranges cost? _____

15) A car gets 16.8 miles per gallon. How far can you drive with 9.6 gallons? _____

(L-2)

16) 9.1 x 10 = _____

17) .06 x 100 = _____

18) 31.07 x 1000 = _____

19) 14.7 x 100 = _____

20) .0007 x 1,000,000 = _____

(L-3)

41

Pretest L

21) .2 x .4 x .3 = _____

22) .04 x .001 x . 9 = _____

23) 79.01 x .021 = _____

24) .1 x .2 x .3 = _____

25) 1,700 x 4.5 x .02 = _____

(L-4)

State Demonstration Program
Pittsburg Unified School District

MULTIPLICATION OF DECIMALS L - 1

Name _____ Period ____ Date _____

Objective: You will be able to multiply decimal numbers.

Multiplication of Decimals

Overview Practice Sheet

Follow these steps to do all multiplication of decimal problems.

Step I - multiply the numbers together - ignore the decimal points.

Step II - Count the number of decimal places. Start at right of number and move decimal point the number of decimal places you counted.

	Step I	Step II
Examples:	1.41	2 decimal places
	x .30	2 decimal places
	4230	4 decimal places

answer is .4230

.07	2 decimal places
x .3	1 decimal place
21	3 decimal places

you have to annex a zero

answer is .021

3.6	1 decimal place
x 4	0 decimal place
144	1 decimal place

14.4

Put decimal point in products.

1) .3 × 5 = 15

1 decimal place + 0 decimal places = 1 decimal place

2) .4 × .3 = 12

1 decimal place + 1 decimal place

3) 1.2 × 5.4 = 48 + 60 = 648

1 decimal place + 1 decimal place

4) .45 × 5 = 225

2 places + 0 places = __ places

5) .45 × .5 = 225

2 places + 1 place = _ places

6) 4.5 × .5 = 225

1 place + 1 place = _ places

7) .45 × .05 = 225

2 places + 2 places = _ places

Multiply the following:

In these problems, put in only the decimal point. Annex zeros if they are needed.

8) .02 × .3 = 012

9) 3.2 × .01 = 32

10) .43 × .04 = 172

11) .04 × .4 = 16

12) 4.6 × .04 = 184

13) 3.01 × .04 = 1204

14) .3 × 8 = 2.4

15) .09 × 2 = .18

16) .9 × .7

17) 3.5 × 7

18) .04 × 1

19) .001 × 3

20) .04 × .1

21) .09 × 1

22) .03 × 2

23) .02 × 4

24) .03 × 3

25) .04 × .03

26) .002 × .01

27) .021 × .01

28) .002 × .001

Do these problems. (WATCH THE DECIMAL POINT.)

29) .04 × .4

30) 3.2 × .2

31) 82 × .01

32) .001 × .02

33) 4.21 × .06

34) .8 × .21

35) 31 × .04

36) .85 × .06

37) 8.7 × 4

38) 6.1 × .41

39) 71 × .042

40) .04 × .001

MULTIPLICATION OF DECIMALS L - 2

Name_____Period_____Date_____

Objective: You will be able to rewrite multiplication of decimal numbers from the horizontal to the vertical form.

Problems with multiplication of decimal numbers must sometimes be rewritten by you.

Sample: 4.2 x .33 Rewrite as

$$\begin{array}{r} 4.2 \\ \times\ .33 \\ \hline 126 \\ 126 \\ \hline 1.386 \end{array}$$

Rewrite and solve these problems:

1) 28 x .27 = Rewrite and solve

$$\begin{array}{r} 28 \\ \times\ .27 \\ \hline 196 \\ 56 \\ \hline 7.56 \end{array}$$

2) .25 x .12 =

3) 38.2 x 1.9 =

4) Complete this chart. Show your work on an extra page of paper

JOB	HOURS PER WEEK	PAY PER HOUR	MONEY EARNED PER WEEK
N.Y.C.	26.5	$1.50	
Babysitting	19.3	$ .75	
Gardner	8.0	$4.00	
Store Clerk	35.5	$2.75	
Seamstress	20.0	$3.25	
Cook	16.8	$1.90	
Auto Mechanic	36.5	$11.00	
Mailman	20.4	$3.50	
Oil Refinery Worker	40.0	$3.75	

5) If you saved $.08 (cents) a day, how much would you save in 3 years? (1 year = 365 days) _____

6) You spend 7.35 hours in school a day. In 180 days you would spend_____hours.

7) A car gets 14.7 miles per gallon of gas. How far could you drive on 8.1 gallons? _____

8) J.C.L. sold 1,100 tickets for $1.25 each, and 300 at $.75. How much did they collect? _____

9) Mr. Jaso bought 4 pairs of sox for $.68 a pair; 6 shirts "on sale" for $.39 each; and 8 pair of walking shorts for $1.32 each. How much did he spend? _____

10) You work after school 25 hours each day for 5 days. At $1.35 an hour, how much money would you make?

_____

11) Your dad jogs 1.03 miles every day. How far does he run in 137.5 days? _____

12) You spend $.54 a day for lunch at school. How much do you spend in: 10 days_____ 100_____

13) If you worked for N.Y.C at $1.58 an hour, how much would you earn for 40 hours?_____

14) At $1.58 an hour, how much would make for 143 hours?

_____

State Demonstration Program
Pittsburg Unified School District

MULTIPLICATION OF DECIMALS L - 3

Name_____ Period_____ Date_____

Objective: You will be able to compute the product of a decimal number by powers of ten.

The "smart person" gets the job done well with the least amount of effort.

Here's a short cut method for multiplying a decimal number by powers of ten.

What is a power of ten? A 1 (one) with any number of zeros after it is a power of ten. (10, 100, 1000 .....)

Multiplying by powers of ten

Step 1) Count the number of zeros in the power of ten.

Step 2) Move the decimal point to the right as many places as there are zeros. (You may have to annex zeros in the product.)

Example: 100 x .046

Step 1) There are 2 zeros in this power of ten.

Step 2) Move the decimal point 2 places to the right, so

100 x .046 = 4.6

1) 9.5 x 10

2) 92.01 x 100

3) 82.9 x 10

4) 4.321 x 100

5) 1.885 x 1000

6) 33.4 x 100

7) 42.53 x 10

8) 42.115 x 1000

9) 6.24 x 10

10) .1425 x 1000

11) 6.83421 x 10

12) 3.13 x 1000

13) .03215 x 1000

14) .0137 x 1000

15) 1.28 x 100

MULTIPLICATION OF DECIMALS L - 4

Name _____ Period _____ Date _____

Objective: You will be able to solve any multiplication problem involving decimals.

Sometimes you need to multiply more than two factors together.

(1) .2 x .3 x .4 =

.06 x .4 = _____

(2) .6 x .1 x .2 =

.06 x .2 = _____

(3) .02 x .04 x .3 =

.0008 x .3 = _____

(4) .4 x .02 x .001 =

____ x .001 = _____

(5) .02 x .02 x .02 =

_____ x ____ = _____

(6) 1.2 x .01 x 3.4 = _____

(7) 3.2 x 8.1 x .01 = _____

(8) .04 x 1 x .1 = _____

(9) 32.1 x .02 x .6 = _____

(10) 46.1 x 3.2 x .04 = _____

(11) 3.4 x .04 x .005 = _____

(12) 3.4 x.02

(13) 81.4 x .004

(14) 7.001 x .021

(15) 79.01 x 3.04

(16) 961.1 x .21

(17) 3.001 x .0002

(18) 71.2 x .1

(19) 2.101 x .08

(20) 3.42 x 2.01

(21) .011 x .361

(22) 36.1 x 10 = _____

(23) 3.61 x 100 = _____

(24) .46 x 1000 = _____

(25) .01 x 100 = _____

(26) 3.02 x 100 = _____

(27) 46.1 x 1000 = _____

(28) 8.914 x 10,000 = _____

(29) .0004 x 1000 = _____

Let's do some estimating.

(30) 5 shirts at $6.95 apiece cost about:

(a) $30 (b) $35 (c) $40 (d) $9 (e) $15

(31) 3 bike tires at $2.57 apiece cost about:

(a) $4.50 (b) $4.00 (c) $5.00 (d) $2.00

(e) $8.00

(32) 6.5 pounds of candy at .99 per pound cost about:

(a) $3.00 (b) $8.00 (c) $6.50 (d) $1.00

(e) $5.00

(33) 2 pairs of shoes at $15.75 per pair cost about:

(a) $50 (b) $70 (c) $20 (d) $31 (3) $1,000

(34) 6 T-shirts at 69¢ apiece cost about _____

(35) 5 pairs of sox at $1.09 a pair and 3 pairs of pants at $6.95 cost about _____.

(36) 8 spark plugs at 69 cents apiece, points at $2.00 and a condensor at 39¢ cost about _____.

(37) 4 cans of peaches at 33 cents a can, 3 boxes of soap at 78 cents, and 9 pounds of meat at 39 cents per pound cost about _____.

Name _____ Period ____ Date _____

Level L Checkpoint 1 - 4

Multiplication of Decimals

1) .9 x 8

2) 1.4 x .5

3) .04 x .9

4) 2.1 x .16

5) 14.3 x .012

(L-2)

6) A car gets 17.8 miles per gallon. How far can you drive with 10.2 gallons? _____

7) 167.1 x 10 = _____

8) 1.892 x 100 = _____

(L-3)

9) .2 x .1 x .3 = _____

10) 2.4 x .3 x .02 = _____

(L-4)

Name _____ Period ___ Date _____

Level L Checkpoint A 1-4

Multiplication of Decimals

1) $\begin{array}{r} .4 \\ \times\ .7 \\ \hline \end{array}$

2) $\begin{array}{r} .5 \\ \times\ 9 \\ \hline \end{array}$

3) $\begin{array}{r} .08 \\ \times\ 9 \\ \hline \end{array}$

4) $\begin{array}{r} 4.1 \\ \times\ .08 \\ \hline \end{array}$

5) $\begin{array}{r} 2.412 \\ \times\ .81 \\ \hline \end{array}$

(L-1)

6) It is .6 miles from school to Johnny's house. If he walks home every day from school this week, how many miles did he walk? School week is 5 days. _____

(L-2)

7) 47.1 x 10 = _____

8) 3.3714 x 1000 = _____

(L-3)

9)

9) .2 x .3 x .01 = _____

10) 3.2 x .01 x 2.1 = _____

(L-4)

State Demonstration Program
Pittsburg Unified School District

Name _____ Period ____ Date _____

POSTTEST L

Multiplication of Decimals

1) .5 x .3

2) 3 x .6

3) 1.4 x .2

4) 3.4 x .3

5) 2.3 x 2.4

6) .43 x 2.1

7) .004 x .3

8) 6.21 x .02

9) .61 x .023

10) .26 x 27

11) 2.3 x 1.61

12) .005 x .07

(L-1)

13) Bill rides his bike 1.7 miles a day. How far does he ride in 8 days? _____

14) Apples sell for $.16 each. How much does one dozen cost? _____

15) A truck gets 12.2 miles per gallon. How far can you drive with 20.5 gallons? _____

(L-2)

(Posttest L)

16) 3.2 x 10 = _____ 17) .01 x 100 = _____

18) 2.31 x 1000 = _____ 19) 17.6 x 10 = _____

20) .0004 x 10,000 = _____

(L-3)

21) .3 x .4 x .3 = _____

22) .01 x .001 x .2 = _____

23) .7 x 5 x .4 = _____

24) .3 x .5 x 1.6 = _____

25) 86.001 x .003 = _____

(L-4)

State Demonstration Program
Pittsburg Unified School District

PROFILE SHEET - BASIC SKILLS

LEVELS	PRETEST		CHECKPOINT		CHECKPOINT	POSTTEST
B 400		1 2 3 4	133	5 6 7	133	134
C 400		1 2 3 4	133	5 6 7	133	134
D 600		1 2 3 4	150	5 6 7 8	150	
D		9 10	150			150
A 600		1 2 3	200	4 5 6 7	200	200
E 600		1 2 3 4	200	5 6 7 8	200	200
F 400		1 2 3 4	133	5 6 7 8	133	134
G 600		1 2 3 4	200	5 6 7	200	200
H 400		1 2 3 4	133	5 6 7	133	134
HA 400		1 2 3	133	4 5 6	133	134
I 400		1 2 3 4	200			200
J 400		1 2 3 4	133	5 6	133	134
K 400		1 2 3 4	133	5 6	133	134
L 400		1 2 3 4	200			200
M 400		1 2 3 4 5	200			200
MA 400		1 2 3 4	200			200

LEVELS	PRETEST		CHECKPOINT		CHECKPOINT	POSTTEST
N 600		1 2 3 4	200	5 6	200	200
O 400		1 2 3 4 5	200			200
P 400	NONE	1 2 3 4 5	200			200
Q 600	NONE	1 2 3 4	120	5 6 7 8	120	
Q		9 10 11 12	120	13 14	120	120
PA 600	NONE	1 2 3 4	200	5 6 7 8 9	200	200
QA 600	NONE	1 2 3 4	150	5 6 7 8	150	
QA		9 10 11 12	150			150
R 400		1 2 3 4 5	200			200
S 400		1 2 3 4	100	5 6 7 8	100	
S		9 10 11 12	100			100
T 600	NONE	1 2 3 4	200	5 6 7 8	200	200
U 600		1 2 3 4	200	5 6 7 8	200	200
V 600	NONE	1 2 3 4	200	5 6 7 8	200	200

FINAL EXAM

Name: _____

Teacher: _____

Date: _____

LEVEL B

(1)
$$\begin{array}{r} 54 \\ 68 \\ 35 \\ 27 \\ +\ 26 \\ \hline \end{array}$$

(2) $532 + 31 + 57{,}439 =$

Fill in the blanks:

$$\begin{array}{rl} 4 & \nwarrow (3)_____ \\ +\ 9 & \swarrow \\ \hline 13 & \leftarrow (4)_____ \end{array}$$

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(5) Sally, Jim and Thomas weigh 205, 178, and 59 lbs. respectively. How much do they weigh all together? _____

LEVEL C

(1)
$$\begin{array}{r} 900 \\ -\ 564 \\ \hline \end{array}$$

(2)
$$\begin{array}{r} 53{,}000 \\ -\ 47{,}493 \\ \hline \end{array}$$

Fill in the blanks:

$$\begin{array}{rl} 8 & \leftarrow (3)_____ \\ -\ 5 & \nwarrow (4)_____ \\ \hline 3 & \end{array}$$

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(5) What is the difference between 417 and 389? _____

LEVEL D

(1)
$$\begin{array}{r} 45 \\ \times\ 6 \\ \hline \end{array}$$

(2)
$$\begin{array}{r} 706 \\ \times\ 9 \\ \hline \end{array}$$

(3) $173 \times 1000 =$ ____

Fill in the blanks:

$$\begin{array}{rl} 5 & \nwarrow (4)_____ \\ \times\ 7 & \swarrow \\ \hline 35 & \leftarrow (5) \end{array}$$

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

FINAL EXAM

Name: _____

Teacher: _____

Date: _____

LEVEL A

(1) Round off to nearest 10's.

a) 78 _____ b) 902 _____

(2)

$1{,}000{,}000 = 10^{_}$

(3) Write in words 47,058

_____

(4) Expand using exponents: 3,476

_____

(5) $8 \times 1{,}000 + 7 \times 100 + 5 \times 1 =$ _____

(1a) _____

(b) _____

(2) _____

(5) _____

LEVEL E

(1) $\frac{58}{7} =$

(2) $8\overline{)7259}$

(3) $840 \div 27 =$ _____

(4) Fill in the blank

$8\overline{)24}$ 3 ← (4) _____

(5) $73\overline{)2643}$

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

LEVEL F

(1) $4 + 3 \times 7 =$ _____

(2) Average of 7, 19 and 55 is _____

(3) $[(10 - 8) + 7] \div 3 =$ _____

(4) $3^3 - 2^2 =$ _____

(5) Larry has 3 times as many marbles as John. If John has two less than ten. How many marbles does Larry have? (Add, Subtract, Multiply, Divide)

first you _____ then _____

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

FINAL EXAM

Name: _____

Teacher: _____

Date: _____

LEVEL G

(1) What is the lowest common multiple of 6 and 8? _____ (1) _____

(2) Prime Factor: (2a) _____

a) 40 = _____ b) 51 = _____ (b) _____

(3) Reduce: (3a) _____

a) $\frac{12}{30}$ = _____ b) $\frac{7}{49}$ = _____ (b) _____

(4) $\frac{7}{5}$ is a(n) _____ fraction (4) _____

(5) Which is not a prime number? _____ (5) _____

41, 47, 53, 57, 51, 67

LEVEL H

(1) $\frac{1}{2} \times \frac{3}{7}$ = _____ (2) $\frac{23}{7}$ = _____ (1) _____

(2) _____

(3) $2\frac{1}{4} \div 3\frac{1}{3}$ = _____ (4) $5 \times 1\frac{1}{4} \times \frac{2}{3}$ = _____ (3) _____

(4) _____

(5) $\frac{3}{7} \div \frac{3}{14}$ = _____ (5) _____

LEVEL HA

(1) $3\frac{1}{2} + 1\frac{1}{4}$ = _____ (1) _____

(2) $5 - 3\frac{2}{5}$ = _____ (2) _____

(3) $16\frac{4}{7} + 8\frac{1}{2}$ = _____ (3) _____

(4) $3\frac{1}{4} - 1\frac{7}{12}$ = _____ (4) _____

(5) $\frac{1}{3}, \frac{2}{5}, \frac{4}{7}$: _____ (5) _____

DRILL RECORD (Red Book) NAME _____
2nd Edition

Score % Date	Practice	Word Problems
Addition & Subtraction I - (Whole Numbers)		
Pre 4	2 3 5 7 9 11	6 8 10 12 14
Post 17	13 15	16
Addition & Subtraction II - (Whole Numbers)		
Pre 18	19 21 23 25 27	20 22 24 26
Post 29		28
Addition & Subtraction III - (Whole Numbers)		
Pre 30	31 33 35 37	32 34 36 38
Post 41	39	40
Addition & Subtraction IV - (Whole Numbers)		
Pre 42	43 45 47 49 51	44 46 48 50
Post 57	53 55	52 54 56
Addition & Subtraction V - (Whole Numbers)		
Pre 58	59 61 63 65	60 62 64 66
Post 67		
Measurement		
Pre 68	69 70 71 72	74
Post 75	73	
Multiplication I		
Pre 76	77 78 80 81	79 82 84
Post 85	83	
Multiplication II		
Pre 86	87 89 91 93	88 90 92 94
Post 95		

DRILL RECORD (Red Book)
2nd Edition

NAME_____

Score % Date	Practice	Word Problems
Multiplication III Pre 96 Post 105	97 99 100 101 103	98 102 104
Division Pre 106 Post 115	107 108 109 111 113	110 112 114
Division II Pre 116 Post 125	117 119 121 123	118 120 122 124
Metric Measurement Pre 126 Post 133	127 129 131	128 130 132
Measurement Pre 134 Post 143	135 137 139 141	136 138 140 142
Review Pre 144 Post 150	145 147 149	146 148

DRILL RECORD (Yellow Book)
2nd Edition

NAME _____

Score % Date	Practice	Word Problems
Addition & Subtraction - (Whole Numbers) Pre 4 Post 13	2 3 5 7 9 11	1 6 8 10 12
Multiplication - (Whole Numbers) Pre 14 Post 25	15 17 19 21 23	16 18 20 22 24
Division I (Whole Numbers) Pre 26 Post 35	27 29 31 33	28 30 32 34
Division II (Whole Numbers) Pre 36 Post 47	37 39 41 43 45	38 40 42 44 46
Division III (Whole Numbers) Pre 48 Post 57	49 51 53 55	50 52 54 56
Metric Measurement Pre 58 Post 69	59 60 63	61 62 64 65 66 67 68
Measurement Pre 70 Post 77	71 72 73 75	74 76
Fractions Pre 78 Post 87	79 80 81 82 83 84 85 86	

DRILL RECORD (Yellow Book)
2nd Edition

Name_____

Score % Date	Practice	Word Problems
<u>Multiplication - Fractions</u>		
Pre 88	89 90 91 93 95	92 94 96
Post 101	97 99	98 100
<u>Addition - Fractions</u>		
Pre 102	103 104 105 106	112 114 116
Post 119	107 108 109 110 111 113 115 117	118
<u>Subraction - Fractions</u>		
Pre 120	121 122 123 125	124 126 128
Post 135	127 129 131 133	130 132 134
<u>Review</u>		
Pre 136	137 139 141 143	138 140 142
Post 150	145 147	144 146 148 149

DRILL RECORD (Green Book)
2nd Edition

NAME_____

Score % Date	Practice	Word Problems
Addition & Subtraction - (Whole Numbers)		
Pre 2	3 4 5 7 9	1 6 8 10
Post 11		
Multiply & Divide - (Whole Numbers)		
Pre 12	13 14 15 17 19	16 18 20
Post 25	21 23	22 24
Multiply - (Fractions)		
Pre 26	27 28 29 30 31	36 38 40
Post 41	32 33 34 35 37 39	
Addition & Subtraction - (Fractions)		
Pre 42	43 45 46 47 48	44 50 52
Post 53	49 51	
Division - (Fractions)		
Pre 54	55 56 57 59 61	58 60 62
Post 65	63	64
Addition & Subtraction - (Decimals)		
Pre 66	67 68 69 70 71	74 76 78
Post 81	72 75 77 79	80
Multiplication - (Decimals)		
Pre 82	83 84 85 86 87	88 90
Post 91	89	
Division - (Decimals)		
Pre 92	93 95 97 98 99	94 96 100
Post 105	101 103	102 104

DRILL RECORD (Green Book)
2nd Edition

NAME_____

Score % Date	Practice	Word Problems
<u>Metric Measurement</u>		
Pre 106	107 108 109 111	110 112 113
Post 117	114 115 116	
<u>Measurement</u>		
Pre 118	119 121 123 125	120 122 124
Post 127	126	
<u>Percent</u>		
Pre 128	129 130 131 133	132 134 136
Post 137	135	
<u>Review</u>		
Pre 138	139 141 143 145	140 142 144
Post 150	147 148	146 149

DRILL RECORD (Blue Book) New Edition NAME_____

Score % Date	PRACTICE	WORD PROBLEMS
Whole Numbers		
Pre 2	3 5 7 9	1 4 6
Post 25	11 13 14 15	8 10 12
	17 19 21 23	16 18 20
		22 24
Fractions		
Pre 26	27 28 29 30	34 38 40
Post 49	31 32 33 35	44 46 48
	36 37 39 41	
	42 43 45 47	
Decimals		
Pre 50	51 52 53 55	54 56 58
Post 71	57 59 60 61	62 64 66
	63 65 67 69	68 70
Ratios and Proportions		
Pre 72	73 74 75 77	76 78 79
Post 83	81	80 82
Decimals, Fractions, Percents		
Pre 84	85 86 87 88	94
Post 95	89 90 91 92	
	93	
Percents		
Pre 96	97 99 101 103	98 100 102
Post 107	105	104 106

DRILL RECORD (Blue Book) New Edition NAME_____

Score % Date	PRACTICE	WORD PROBLEMS
Interest		
Pre 108	109 111 113	110 112 114
Post 117	115	116
Geometry		
Pre 126	127 128 129 130 131 132	
Post 135	133 134	
Perimeter and Area		
Pre 136	137 139 141	138 140 142
Post 151	143 145 147	144 146 148
	149	150
Volume		
Pre 152	153 155 157	154 156 158
Post 159		
Review		
Pre 160	161 163 169	162 164 166
Post 180	171 175 176	168 170 172
	178 179	177 179

HILLVIEW JUNIOR HIGH
CALIFORNIA DEMONSTRATION MATHEMATICS PROGRAM
6 WEEKS PROGRESS REPORT

Grade 7 8 Grade Report for _____ to _____

STUDENT: _____

TEACHER: _____

PERIOD: _____

SCHOLARSHIP	
CITZENSHIP	

We strongly recommend a parent conference for Scholarship grades of D or F and Citzenship of U.

COMPONENTS *Possible points per week ·	%	GRADE	POINTS EARNED	TOTAL POSSIBLE POINTS
Daily Quiz (*30 points)	10			150
Drill (*30 points)	10			150
Homework (*30 points)	10			150
Enrichment Day (*50 points)	$16\frac{2}{3}$			250
Levels: (Pretests, lessons, Checkpoints, Posttests)	$53\frac{1}{3}$			800
TOTAL (Scholarship Grade based on TOTAL POINTS)	100			1500

Comments: _____

_____

_____

If there are any questions concerning this report, please call the Math Office anytime between 8:00 and 3:00 at 432-8649.

GRADING SCALE: If an "F" is received in any component, the highest grade possible is "B+".

1500 = A+	1250 - 1299 = B	900 - 999 = C-
1400 - 1499 = A	1200 - 1249 = B-	850 - 899 = D+
1350 - 1399 = A-	1100 - 1199 = C+	800 - 849 = D
1300 - 1349 = B+	1000 - 1099 = C	750 - 799 = D-
		749 ↓ = F

Parent's Signature _____ _____

(Please return yellow copy to Math Office)

HILLVIEW JUNIOR HIGH
CALIFORNIA DEMONSTRATION MATHEMATICS PROGRAM

TRIMESTER REPORT

Grade: 7 8 Grade Report from _____ to _____

STUDENT: _____

TEACHER: _____

PERIOD: _____

SCHOLARSHIP	
CITZENSHIP	

We strongly recommend a parent conference for Scholarship grades of D or F and Citzenship of U.

COMPONENTS *Possible points per week	%	GRADE	POINTS EARNED	TOTAL POSSIBLE POINTS
Daily Quiz (*30 points)	10			300
Drill (*30 points)	10			300
Homework (*30 points)	10			300
Enrichment Day (*50 points)	$16\frac{2}{3}$			500
Levels: (Pretests, Lessons, Checkpoints, Posttests)	$53\frac{1}{3}$			1600
Final Exam (Bonus Points)				
TOTAL: (Scholarship grade based on TOTAL POINTS)	100			3000

Comments: _____

_____

_____

If there are any questions concerning this report, please call the Math Office anytime between 8:00 a.m. and 3:00 p.m. at 432-8649.

GRADING SCALE: If any "F" is received in any component, the highest grade possible is a "B+".

3000 = A+	2500 - 2599 = B	1800 - [illegible]9 = C-
2800 - 2999 = A	2400 - 2499 = B-	1700 - 1[illegible] = D+
2700 - 2799 = A-	2200 - 2399 = C+	1600 - 165[illegible] = D
2600 - 2699 = B+	2000 - 2199 = C	1500 - 1599 = D-
		1499 ↓ = Fail

Parent's Signature: _____

(Please return yellow copy to Math Office)

EVALUATIONS

CTBS

1. In terms of percentile ranks, the median scores increased between the September 1978 and the May 1979, and both levels between the September 1979 and the May 1980 administrations of the CTBS mathematics test. These increases were in all three parts of the tests as well as in the total scores. (See table 1)

TABLE I - PERCENTILE RANKS

Grade	Test	Median Scores in Percentiles:		Change in Median %iles
		Pretest	Posttest	
7 (Level 3)	Computation	41%ile	72%ile	+ 31
	Concepts	46	61	+ 15
	Applications	43	59	+ 16
	TOTAL	41%ile	67	+ 26
8 (Level 3)	Computation	35%ile	50%ile	+ 15
	Concepts	35	48	+ 13
	Applications	33	44	+ 11
	TOTAL	34%ile	46%ile	+ 12
8 (Level 4)	Computation	85%ile	91%ile	+ 6
	Concepts	70	81	+ 11
	Applications	66	79	+ 13
	TOTAL	77%ile	87%ile	+ 10

2. In terms of grade equivalents, all three quartile scores on the CTBS total mathematics advanced significiently in all three testing sections. (See table II)

TABLE II - GRADE EQUIVALENTS

Statistic	Months of Growth on Total Mathematics Scores in:		
	Grade 7	Grade 8 (Level 3)	Grade 8 (Level 4)
Q_3	18 months	16 months	26 months
Q_2	27 "	14 "	54 "
Q_1	25 "	20 "	63 "

3. Instructional time for all sections tested was 8 months. From table II we can approximate growth per months of instruction.

	Grade 7	8 Level 3	8 level 4
Q3	2.3	2.0	3.3
Q2	3.4	1.8	6.8
Q1	3.1	2.5	7.9

4. In each of the three sections the percent of students who were at or above the national norm on the CTBS total mathematics was higher on the May tests than the Setpember tests. See table III)

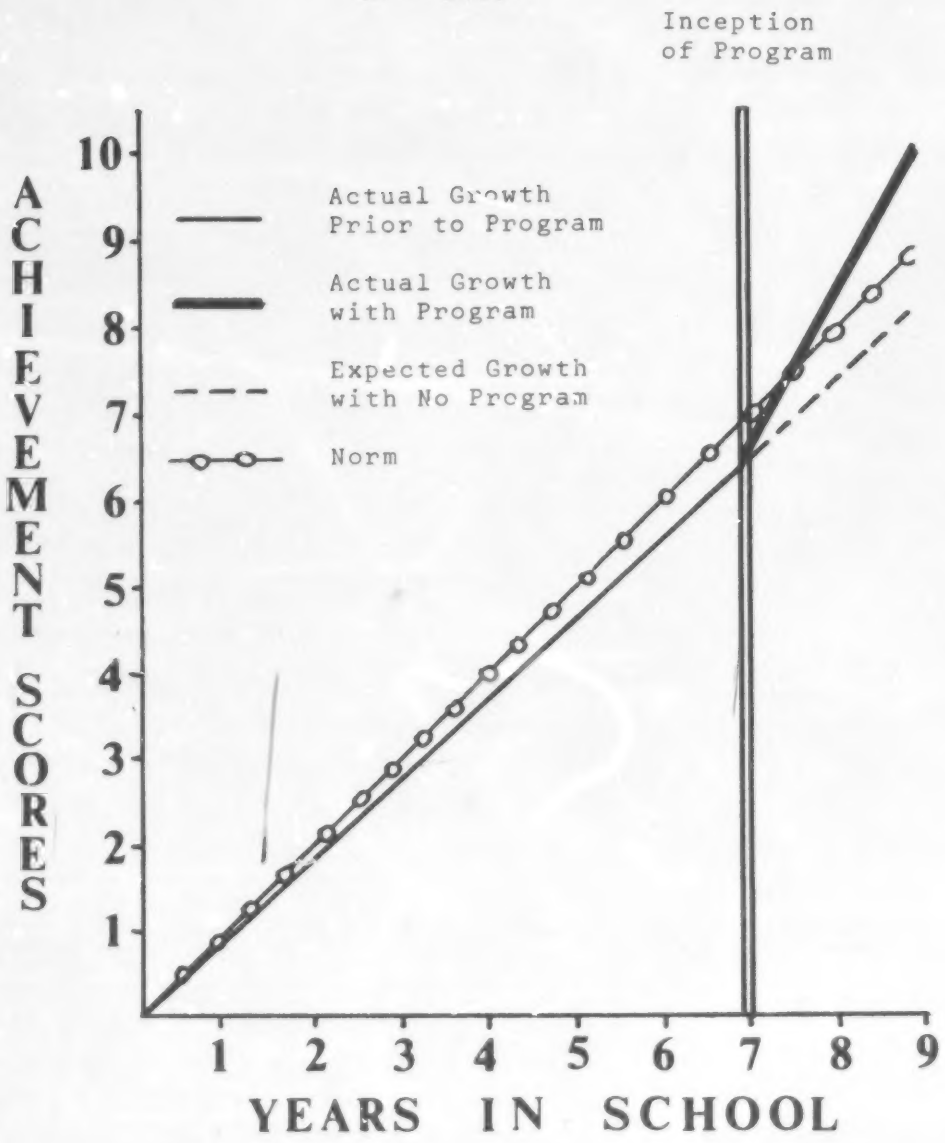
TABLE III - COMPARISON WITH NATIONAL NORMS

Statistic	Percent At or Above Norm		Change
	Pretest	Posttest	
7	41%	69%	+28%
8 (Level 3)	20%	34%	+14%
8 (Level 4)	90%	100%	+10%

Student Progress by
Mean Grade Equivalent Scores
Hillview State Demonstration
Program in Mathematics

Sept 1978 - May 1980

(N = 162)



	Grade Equivalent
September 1980 CTBS Form S Level 3	6.5
May 1980 CTBS Form S Level 3 and 4	10.0